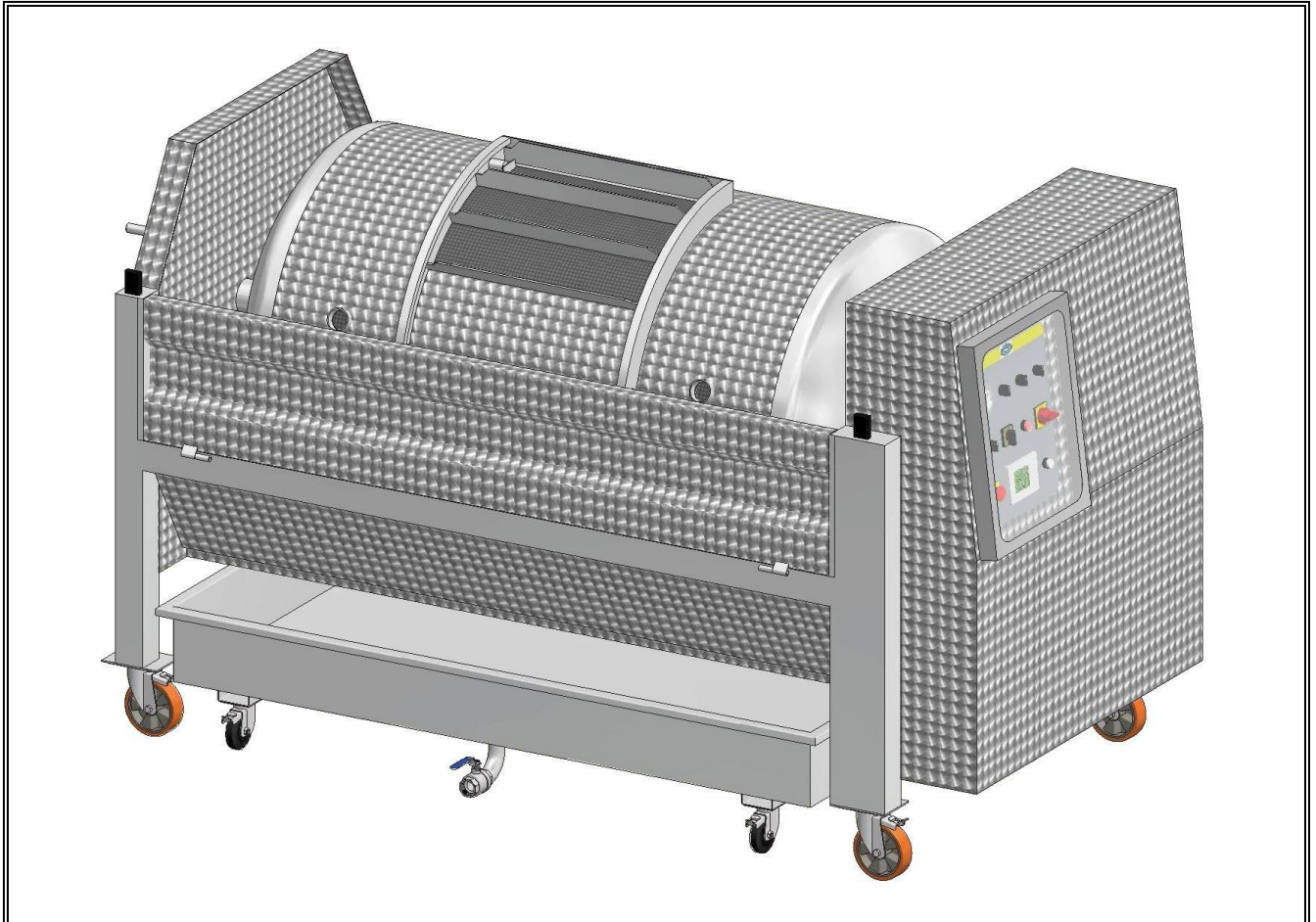


# PNEUMATIC PRESS

## PN ZETA



### ENGLISH TRASLATION OF THE INSTRUCTION MANUAL AND SPARE PARTS



Via dell'Artigianato, 70/72 Z.A. - 36043 Camisano Vicentino (VI) Italy

Tel. +39 0444.719402 – Fax +39 0444.719423

Web site: [www.zambellienotech.it](http://www.zambellienotech.it)

E-mail: [info@zambellienotech.it](mailto:info@zambellienotech.it)

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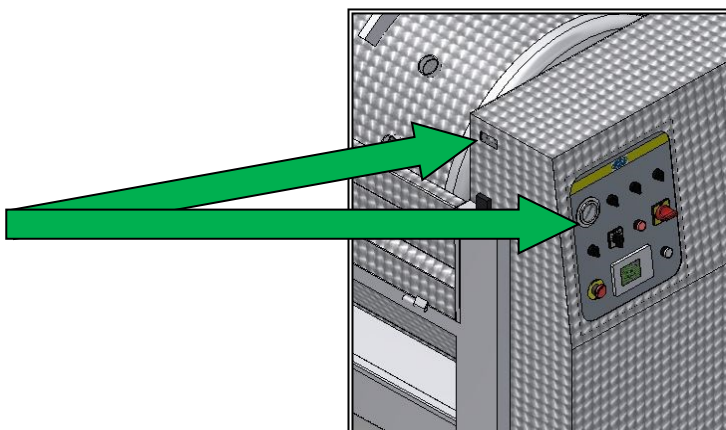
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## 0. MACHINE PLATES

### EC PLATE

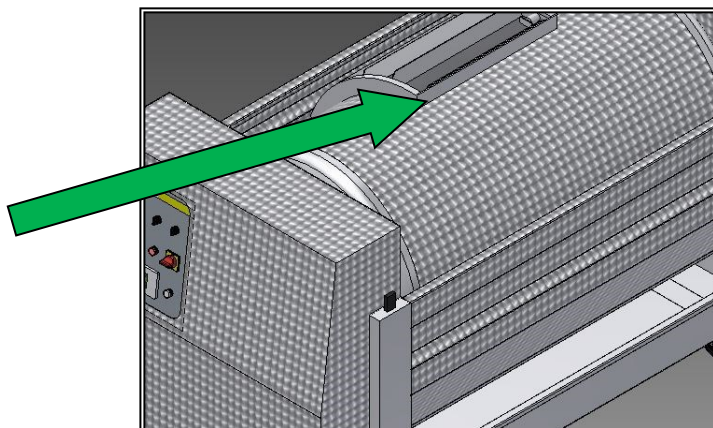
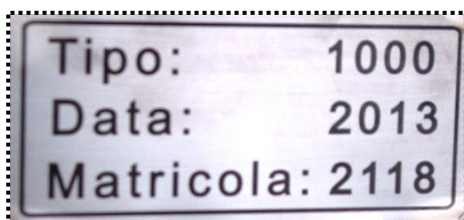
Located inside the electric panel and on the side of the machine.



### CASK PLATE

Located on the outside of the loading hatch.

Indicates the capacity in litres, the year of manufacture and the serial number of the cask.



### IMPORTANT:

THIS MANUAL IS THE PROPERTY OF THE COMPANY ZAMBELLI ENOTECH S.R.L. ANY REPRODUCTIONS THEREOF, EVEN PARTIAL, ARE NOT ALLOWED.

### DOCUMENT TYPE:

INSTRUCTION MANUAL AND SPARE PARTS.

### MACHINE TYPE:

HORIZONTAL PNEUMATIC PRESS

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## 0. RESPECT FOR EU LEGISLATION

REFERENCE	TITLE
EC directive no. 2006/42	Known as “Machinery Directive”
EC directive no. 2004/108	On Electromagnetic Compatibility (EMC)
EC regulation no. 1935/2004	On materials and articles intended to come into contact with food
EC regulation no. 2023/2006	On good manufacturing practice for materials and articles intended to come into contact with food

## 1. INTRODUCTION

### 1.1 MANUAL

The manual is to be considered an integral part of the machine, therefore:

- *Every part of it must be kept intact;*
- *It must stay with the machine until its demolition (even if the machine is moved, sold, hired out, etc.)*

### 1.2 MANUFACTURER DETAILS

Manufacturer: ZAMBELLI ENOTECH s.r.l.  
Via dell'Artigianato, 70/72 Z.A.  
36043 – Camisano Vicentino (VI) Italy  
Tel.: +39 0444 – 719402  
Fax: +39 0444 – 719423  
e-mail: [info@zambellienotech.it](mailto:info@zambellienotech.it)  
Website: [www.zambellienotech.it](http://www.zambellienotech.it)

### 1.3 TECHNICAL ASSISTANCE

The technical assistance service is at Customers' disposal for:

- *Clarifications and information;*
- *Assistance at the Customer's site provided by specialist personnel with a fee to cover the transport and labour costs;*
- *Spare parts.*



**N.B.** Please remember that:

- *The Customer must always purchase original spare parts or that have been approved by the Manufacturer.*
- *The use of non-original spare parts and defective or incorrect assembly release the Manufacturer from all responsibility.*

### 1.4 WARRANTY

The company ZAMBELLI ENOTECH s.r.l. guarantees that the machine was made with respect for legislation in force.

The warranty for the product lasts 12 months; electrical parts are excluded from the warranty.



The warranty also excludes all consumables.

The purchaser has the right to the replacement of faulty parts only, on the condition that they are proven to be faulty at our site or the Customer's site. There will be a fee to cover transport and labour costs.

## 2. GENERAL DETAILS

### 2.1 PRESENTATION

Our pneumatic presses are entirely made of AISI 304 stainless steel, are assembled on wheels with brakes and the components are all high quality.

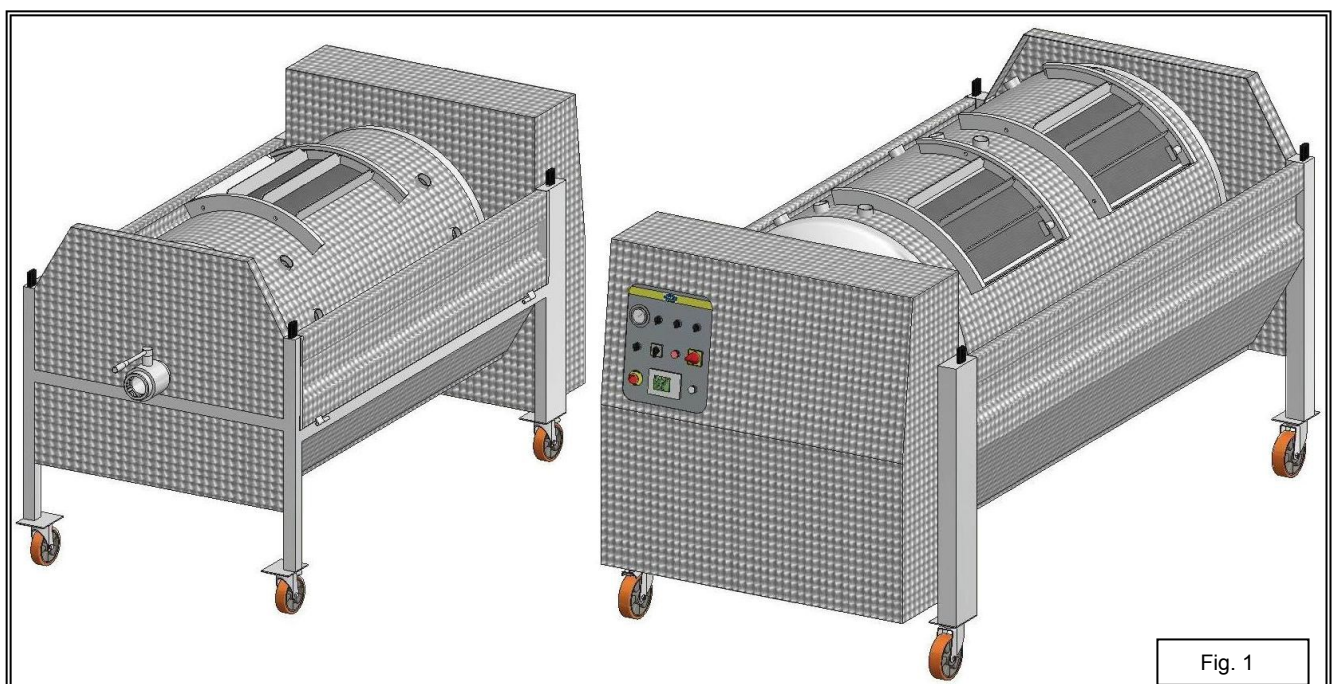
The press comprises a rotating drum or cask, a membrane fixed inside the cask and one or two sliding hatches for loading, dripping and unloading the product. They are also equipped with a valve for axial loading and a liquid collection tank on wheels.

All the operations can be performed with manual controls by the operator or in automatic mode by a PLC. The operations and controls are typed in and displayed through a touch screen on the control panel.

### 2.2 MODELS

The difference between the various models mainly consists of the different loading capacities.

The standard machines are built as shown in Fig. 1 with one or more loading hatches according to the size and on request they can be equipped for being fixed to the ground and raised, with fixed legs or mobile shims.



## 2.3 TECHNICAL DATA

Model PNZETA	Total power (kW)	Weight (kg)	No. loading hatches	Blower (Becker)	Compressor (Becker)	Loading capacity (kg)		
						Whole grapes	Stemmed grapes	Fermented grapes
6	2.2	365	1	SV5.90/2	DT 4.25	450	800/900	900/1000
10	3.3	520	1	SV8 130/2	DT 4.25	800	1500/1600	1600/1700
14	4.6	660	1	SV8 130/2	DT 4.40	1000	2100/2200	2200/2300
17	6.4	730	1	SV8 130/2	KDT 3.60	1200	2600/2700	2700/2800
22	6.4	805	2	SV8 130/2	KDT 3.60	1600	3300/3400	3400/3500
27	8.5	988	2	SV8 190/2	KDT 3.80	2000	4200/4300	4300/4400
32	8.5	1530	2	SV8 190/2	KDT 3.80	2300	4800/4900	4900/5000
45	8.5	1800	2	SV8 190/2	KDT 3.80	3000	6800/6900	6900/7000
50	10	2100	2	SV8 190/2	KDT 3.80	3500	8000/9000	10000/11000
60	11.5	2400	2	*****	*****	4500	12000/12900	13000/13900
80	11.5	3500	2	*****	*****	5600	16000/16900	17000/17900

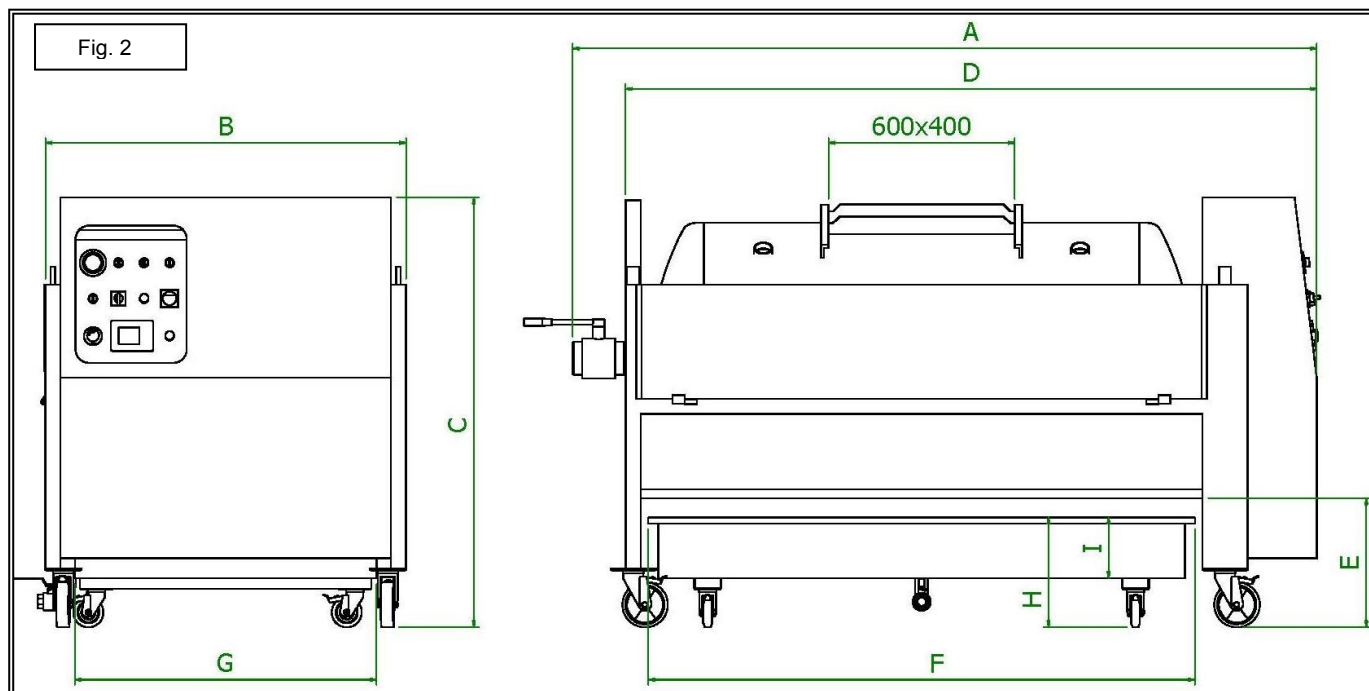
## 2.4 DIMENSIONS

The data in the table refers to Fig. 2.

Model PNZETA	Dimensions (mm)								
	PRESS					TANK			
	A	B	C	D	E	F	G	H	I
6	2000	1100	1350	1850	350	1170	1050	315	200
10	2500	1200	1440	2300	430	1800	1070	365	200
14	2650	1300	1540	2450	430	1900	1300	365	200
17	2750	1500	1600	2500	400	1900	1320	365	200
22	3200	1500	1650	3000	440	2420	1320	395	200
27	3250	1600	1770	3050	485	2420	1320	395	200
32	3750	1600	1800	3550	470	2570	1320	400	200
45	****	****	****	****	****	****	****	****	****
50	4400	1800	2250	4150	650	3000	1600	780	300
60	****	****	****	****	****	****	****	****	****
80	****	****	****	****	****	****	****	****	****

N.B. The data in the table is not binding; the company reserves the right to make any changes without prior notice. The missing data refers to presses currently being restyled.





### 3. SAFETY STANDARDS

#### 3.1 INSTRUCTIONS

Only use the press after carefully reading our manual. If it gets lost you can ask for another copy by contacting: Zambelli Enotech s.r.l. – Via dell'Artigianato, 70/72 Z.A. - 36043 Camisano Vicentino (VI) – ITALY

#### 3.2 INTENDED USE

The PNZ horizontal pneumatic presses were designed for pressing whole grapes, stemmed grapes, must and marc.

It is strictly forbidden to use the machine for pressing any material or item that is not indicated in the intended use above.

#### 3.3 USING THE PRESS

It is recommended that only skilled operators who have read the manual use the press.  
Do not allow children or unauthorized people or without the appropriate knowledge to use the machine.

### 3.3 CHECKS AND CONNECTION

- *Always check, before every use, that the electrical cables are intact and in the event of damage or abrasions replace the cable;*
- *Do not let machines or tools that could damage the electrical cables run over them;*
- *Do not rest the power supply cable on wet or muddy surfaces;*
- *Switches and plugs must be protected from humidity/damp;*
- *Always check before connecting any equipment that the mains voltage is the same as the value indicated on the machine plates;*
- *The wiring in the house or winery must have a differential and magneto-thermal circuit breaker, in order to guarantee people's safety in the event of failure;*
- *Keep children and irresponsible people away from electrical equipment.*

### 3.4 SAFE USE AND MAINTENANCE

- *Do not perform any operations or servicing not mentioned in the manual;*
- *During operation the machine must have the brakes on the wheels or be fixed to the ground;*
- *Check the correct position and operation of the guards and safety devices before starting the machine;*
- *During operation keep a safe distance from the machine;*
- *Do not open the loading hatch if the machine has not finished operating;*
- *Do not open the loading hatch if the pressure gauge indicates any pressure, even a minimum level, inside the cask;*
- *In the event of any faults, contact the manufacturer.*

### 3.5 RESPONSIBILITY



The manufacturer ZAMBELLI ENOTECH s.r.l. declines all responsibility in the event that the instructions in our manual are not carefully followed or if any improper use is made of the machine. Before performing any servicing read the manual or contact the manufacturer or approved retailer.

## 4. SHIPMENT AND POSITIONING

### 4.1 TRANSPORT

The machine is shipped fully assembled, packaged and fixed onto a pallet (unless otherwise agreed with the customer).



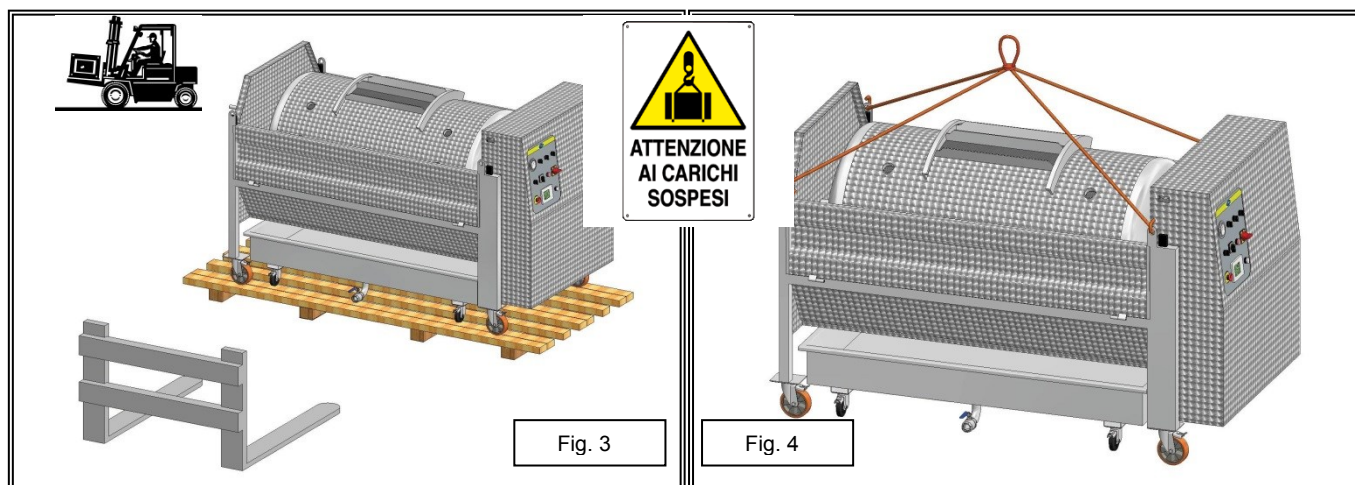
On delivery the customer must check that the machine packaging is intact, making sure no damage has occurred during transport. If any damage is discovered, it must be pointed out to the carrier and the manufacturer or retailer must be informed immediately.

### 4.2 LOADING AND POSITIONING

**CAUTION:** the machine must be unloaded using equipment suitable for its size and mass.

Unload the machine using a fork-lift truck, taking care not to hit the protruding parts of the machine and to pick it up by balancing the weight (the machine is heavier on the controls side since the motor, compressor and blower are on that side) [fig.3].

Alternatively, the machine can be unloaded by lifting it with belts or chains attached to the eyebolts on the uprights of the machine itself [fig.4].



The machine must be unloaded by trained personnel taking care to ensure that there are no children or third parties within the area of movement of the suspended loads.



Before unloading the press, make sure the floor where it is to be placed is level and suitable to support the weight of the machine plus that of the product to be loaded onto it.

## 5. MACHINE DESCRIPTION

### 5.1 MACHINE COMPONENTS

- A) Control panel;
- B) Rotating drum or cask;
- C) Loading and unloading hatch;
- D) Liquid collection tank;
- E) Axial loading valve;
- F) Opening side;
- G) Component protection cover.

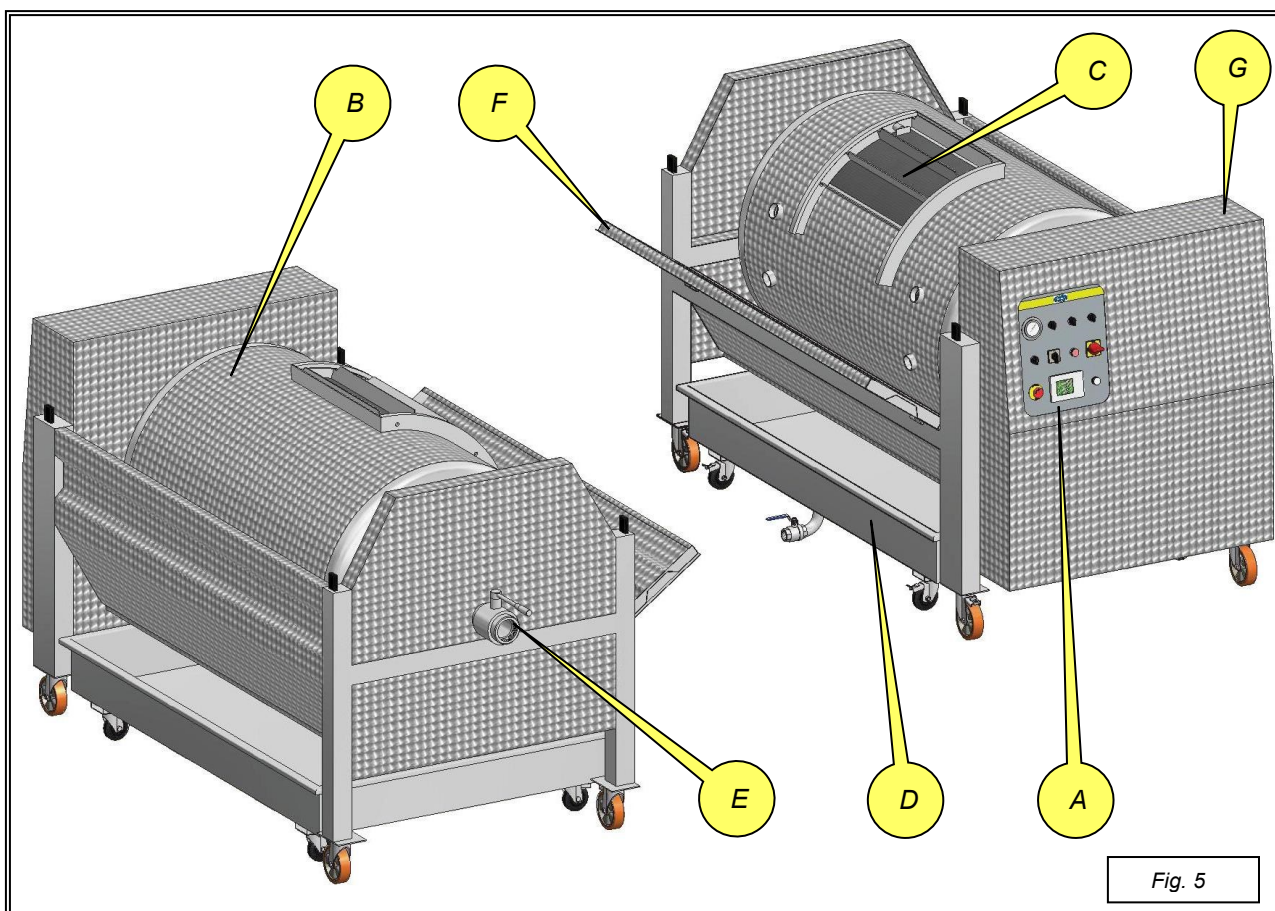


Fig. 5

### 5.2 CONTROL PANEL

The control panel is on the front of the machine and consists of: selectors, pressure gauge, emergency button and touch screen display. The controls on the panel give the operator the chance to work in 3 modes:

- **Manual mode:** the operator performs all the machine operations, from rotation to pressurization, etc. (this type of processing is not recommended unless the PLC is malfunctioning, since it requires excellent knowledge of the work stages of the press and potentially harmful operations for its components).

- **Semi-automatic mode:** through the touch screen, the operator sets up a program by presetting the manufacturer's default parameters, then the machine performs the work cycle in automatic mode.
- **Automatic mode:** through a 7-position selector the operator chooses one of the pre-set programs and the machine performs it in automatic mode.

#### PANEL CONTROLS:

1. Analog pressure gauge;
2. Rotation selector;
3. Pressure/depression selector;
4. Pressure selector 0.6/1.5 bar;
5. Manual/automatic selector;
6. Program selector;
7. Start and reset button;
8. General switch;
9. Emergency button;
10. Touch screen display;
11. Power on indicator;

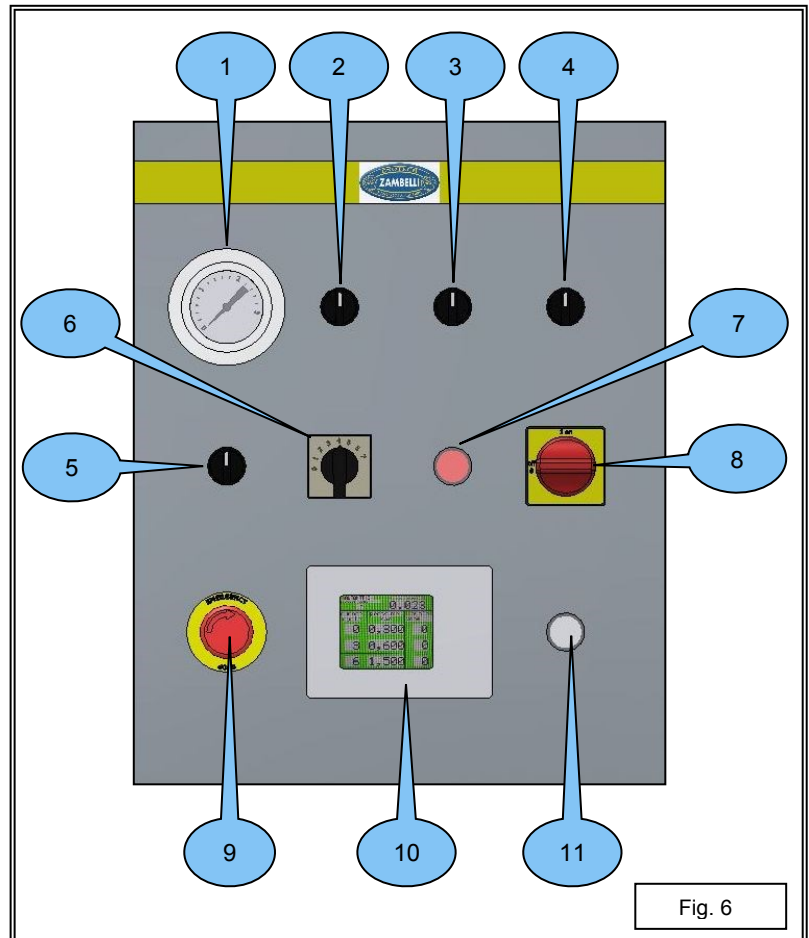


Fig. 6

#### PANEL COMPONENTS:

12. PLC;
13. Protection fuses;
14. Transformer;
15. Terminal board;
16. RJ45 connector;
17. Electric control panel connectors;

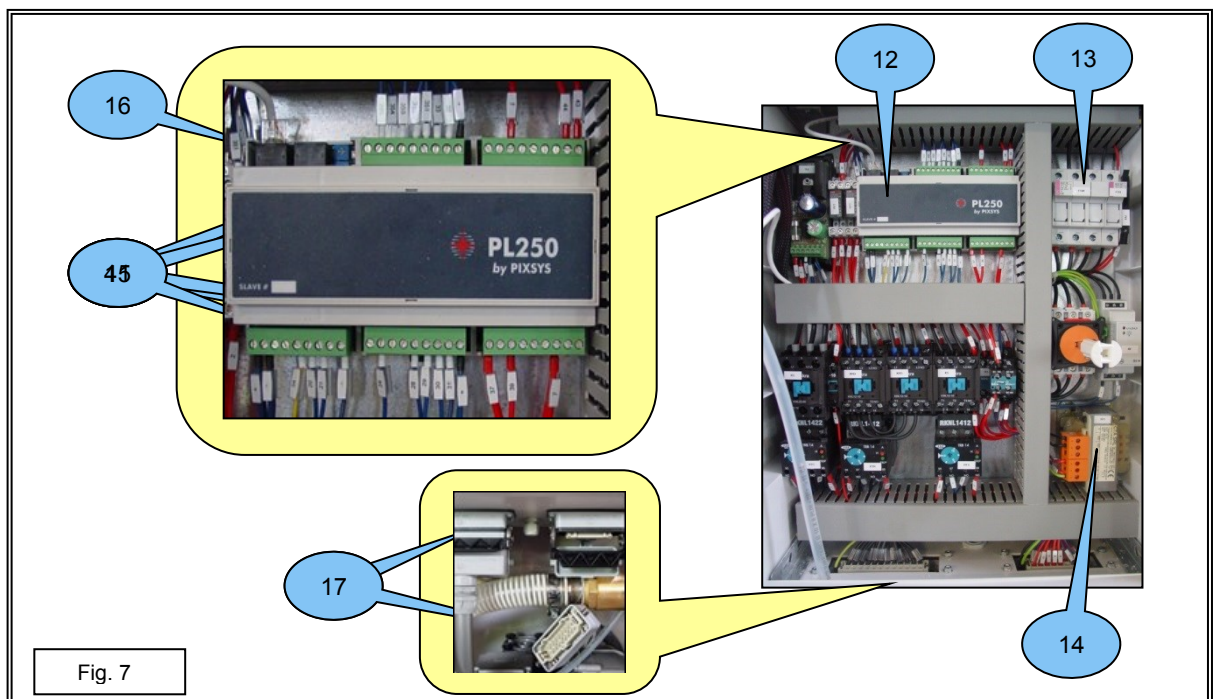


Fig. 7



### 5.3 ROTATING DRUM OR CASK

The press cask is entirely made of AISI 304 stainless steel, inside it there is an inflatable food-grade PVC membrane and it is equipped with one or more loading/unloading hatches. The cask is fixed to the frame with two brasses.

#### CASK COMPONENTS:

Fig.8:

- 18. Ratio motor;
- 19. Chain;
- 20. Gear;
- 21. Front brass;
- 22. Front greaser;
- 23. Rear brass;
- 24. Rear greaser;

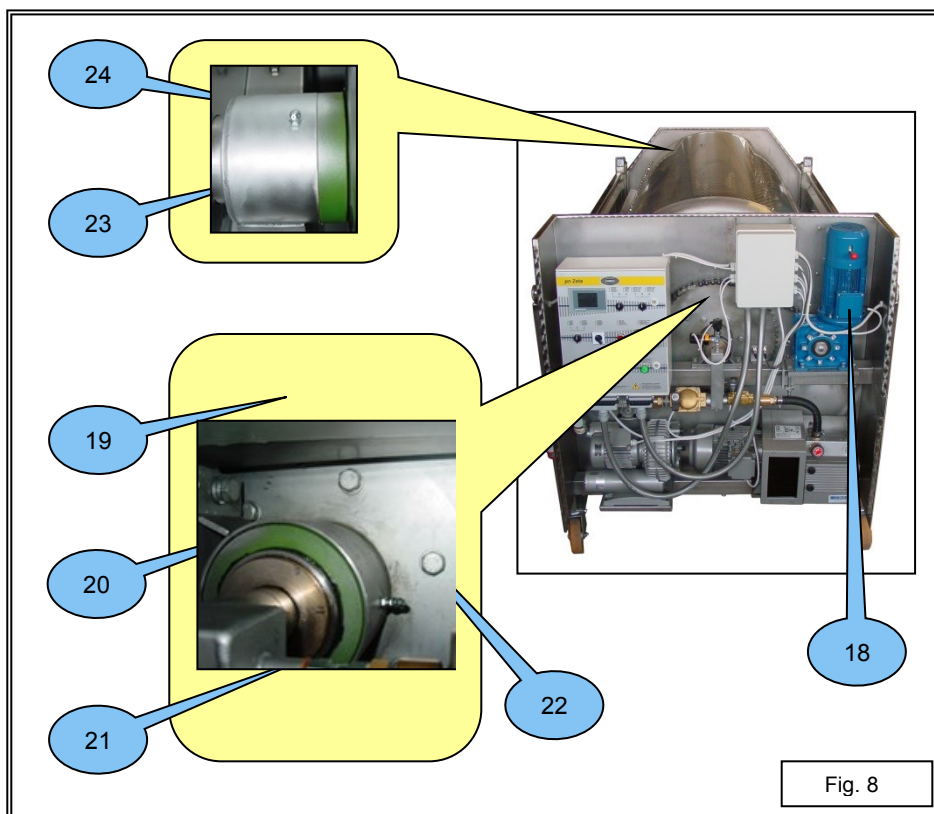
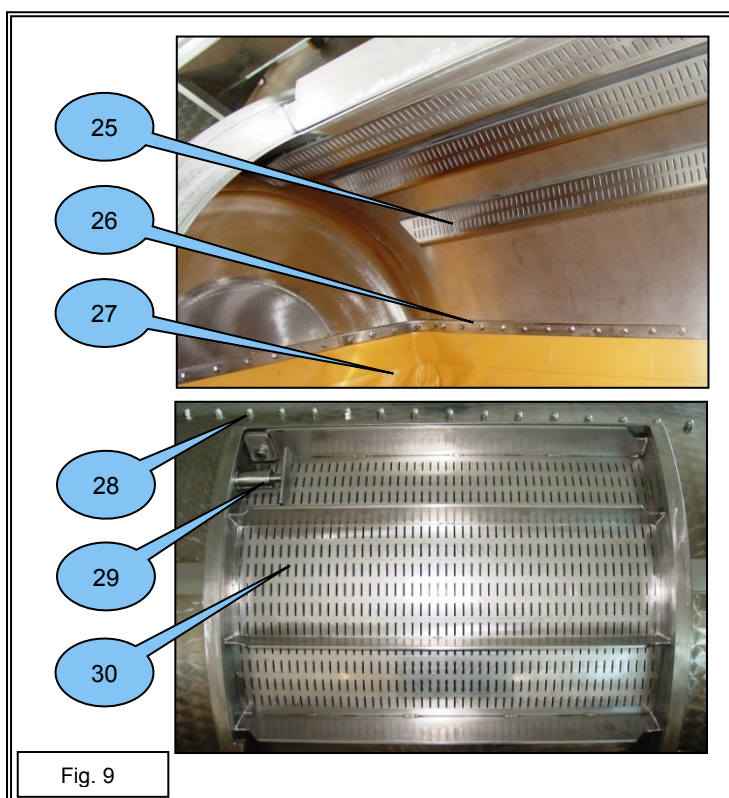


Fig.9:

- 25. Drip channels;
- 26. Bolted membrane fixing plate;
- 27. PVC membrane;
- 28. Outer membrane fixing bolts;
- 29. Hatch-locking hook;
- 30. Loading and unloading hatch.

Fig.10:

- 31. Drip channel outlet;
- 32. Outer channel fixing bolts;





## 5.4 PNEUMATIC UNIT COMPONENTS

The machine presses the product by inflating the internal membrane, therefore it is equipped with a compressor, blower and pressure switches.

### PNEUMATIC UNIT COMPONENTS

Fig.11:

- 33. Interconnection box;
- 34. Compressor;
- 35. Compressor solenoid valve;
- 36. Blower solenoid valve;
- 37. Blower;
- 38. Digital pressure switch;
- 39. Vacuum switch;
- 40. Pressure gauge air connection;
- 41. Pressure switch 1 (0.6 bar);
- 42. Pressure switch 2 (1.5 bar);

## 5.5 SAFETY COMPONENTS

The press is equipped with micro switches, safety photocells, cases and covers to protect the operators from any possible accidental contact with the moving parts.

### SAFETY COMPONENTS

Fig.12:

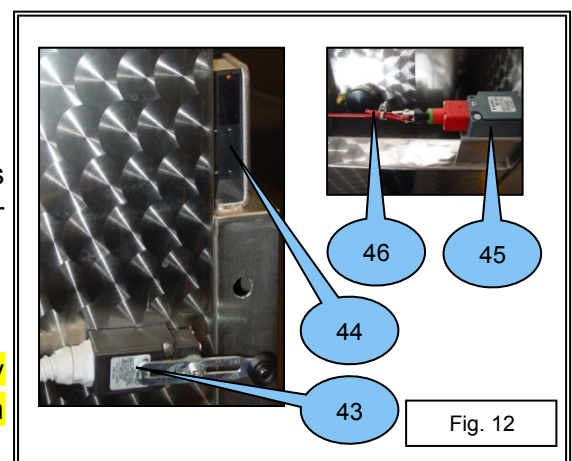
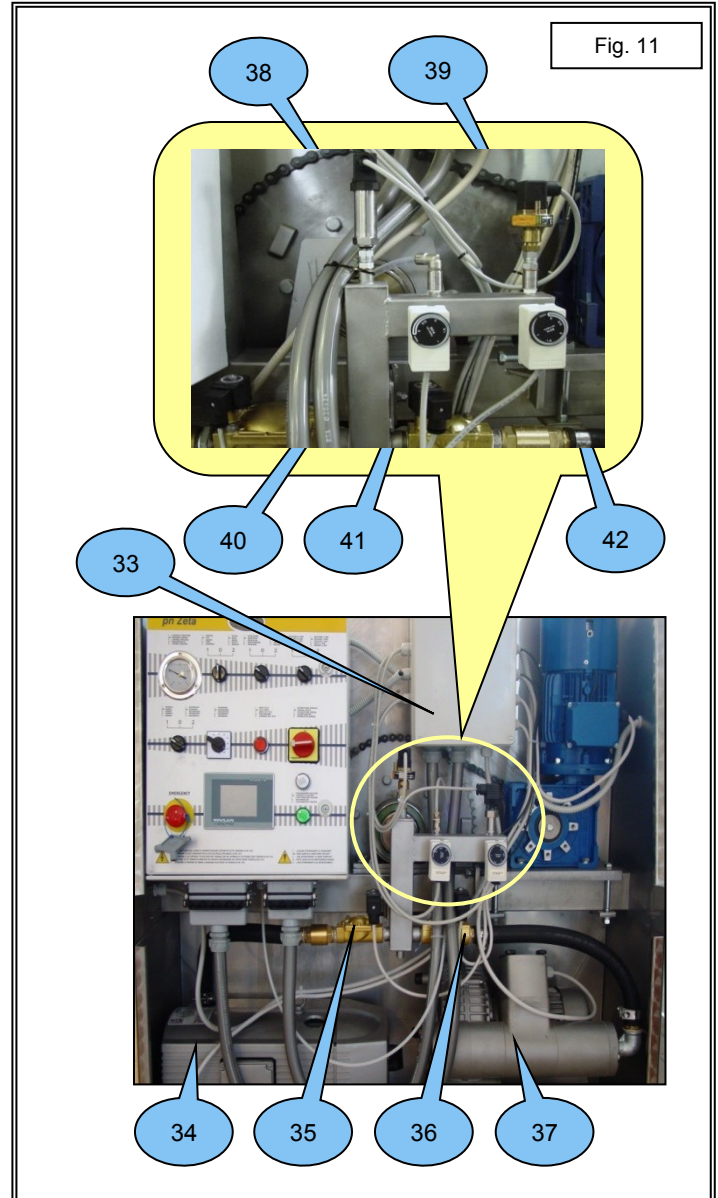
- 43. Side hatch micro switch;
- 44. Cask perimeter photocell;
- 45. Cord micro switch;
- 46. Perimeter cord for micro switch (only in 6 HL presses);



**It is absolutely forbidden** to work with the guards and micro switches disassembled, tampered with or disabled.



**The manufacturer declines all responsibility for any micro switches and guards that have been tampered with, disassembled or disabled.**



## 6. COMMISSIONING

The press can be used in three modes that can be selected with selector **5** (fig.6 & fig.13):

### ➤ POSITION 0:

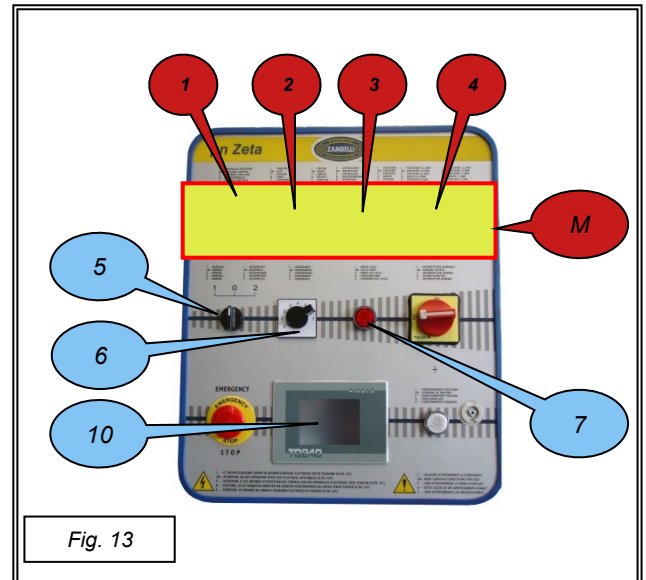
- The machine is in stand-by;

### ➤ POSITION 1:

- MANUAL mode

### ➤ POSITION 2:

- AUTOMATIC mode;
- SEMI-AUTOMATIC mode.



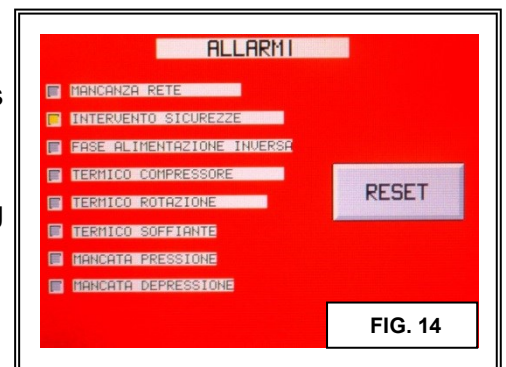
## 6.1 PRELIMINARY OPERATIONS

Position the press and put the brakes on so that the loading, unloading, operating and control can be performed without any impediments. Connect the press to the electric power supply, taking care to ensure that the cable is not within the working area of the machines or operators. Check that the guards and safety devices are in place, fixed and operating. Make sure the drip channel plugs have been removed (31)[fig.10 pag.14].

## 6.2 SWITCHING ON AND ALARMS

Whenever the machine is switched on an alarms window is displayed (Fig.14).

This window shows the machine alarms, hence providing diagnostics on the problems that can arise during operation.



Whenever the machine is switched on and if there is an alarm, the start cycle button 7 must be used (to unlock the machine) and the RESET button (on the display) to eliminate the alarms window.

If you are working in automatic or semi-automatic mode, when the restart button (7) is pressed the program will restart from the point at which it was interrupted.



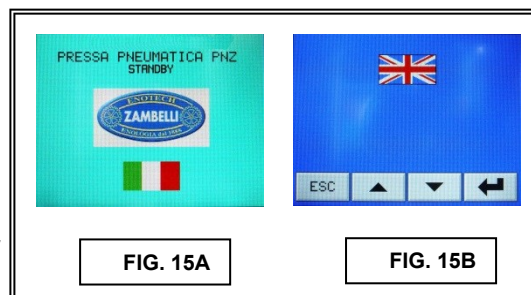
**IF THERE IS A POWER CUT, IT IS NECESSARY FIRST OF ALL TO MANUALLY DEFLATE THE MEMBRANE, THEN IT IS NECESSARY TO START AGAIN WITH A NEW PROGRAM.**

## -LIST OF ALARMS

- **Power cut:** due to a power cut (the alarm can only appear during an automatic or semi-automatic program).
- **Safety device intervention:** due to the intervention of safety devices such as the photocells (44), the micro switches (43) the emergency button (9) or if the start cycle button (7) is not pressed.
- **Inverse power supply phase:** switch off the machine and invert a plug phase.
- **Compressor thermal switch:** wait for the technical time necessary for the thermal switch to cool down; if the problem persists contact the manufacturer or the approved supplier.
- **Rotation thermal switch:** wait for the technical time necessary for the thermal switch to cool down; if the problem persists contact the manufacturer or the approved supplier.
- **Blower thermal switch:** wait for the technical time necessary for the thermal switch to cool down; if the problem persists contact the manufacturer or the approved supplier.
- **No pressure:** check that the membrane is intact; if the problem persists contact the manufacturer or the approved supplier.
- **No depression:** check that the membrane is intact; if the problem persists contact the manufacturer or the approved supplier.

## 6.3 CHOICE OF LANGUAGE

After resetting the alarms screen, the screen shown in fig.15a will appear on the display. The flag indicates the language of the instructions; if you wish to change language by clicking on it the screen shown in fig. 15b will appear. You can use the arrows (▲▼) to scroll through the various options and the “ESC” key to leave without making any changes and the enter key (↵) to confirm the choice.



## 6.4 LOADING THE MACHINE

The product can be loaded into the machine in two ways: through the loading hatch (30), or through the axial valve (E).



**ALWAYS CHECK THAT THE MEMBRANE IS DEFLATED BEFORE LOADING OR ROTATING THE CASK** (to avoid tearing the membrane).

### LOADING THROUGH THE HATCH

Position the panel selector (5) in “manual” mode (pos.1) and use the selector (2) to make the cask turn until the hatch is in the best position for loading.

During the loading operation switch off the machine to prevent any danger to machinery or people.



If you are loading manually, make sure there are no sharp items mixed with the product (scissors, cutters, metal wire or other items used for harvesting the grapes).

## AXIAL LOADING

Connect the delivery pipe to the loading valve (**E**), position the selector (**5**) in “automatic” mode (pos.2) and the program selector (**6**) on number 7 (the cask will start to turn with a frequency of 5 rotations in one direction and 5 in the other). Open the loading valve and start to fill the machine

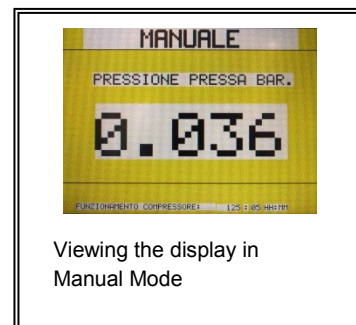


**CAUTION:** Only load the machine up to  $\frac{3}{4}$  of its maximum capacity in order to prevent malfunctioning or damage to the machine.

## 6.5 MANUAL MODE

### CHECK THAT THE LOADING HATCH AND AXIAL VALVE ARE CLOSED.

- A) SUPPLY POWER: using the general switch (**8**) and the emergency button (**9**);
- B) STARTING THE MACHINE: button **7**;
- C) CHECKING THE LIST OF ALARMS: if the “Inverted power supply phase” error is shown, correct it immediately (in manual mode the machine can also operate by turning in the opposite direction but this will break the compressor blades);
- D) ALARM RESET: through the **reset** button on the display;
- E) SELECTOR **5**: positioned in manual mode, to activate the manual controls highlighted in red (**M**) [fig.13 pag.16].
- F) SELECTOR **2**: turn the cask until it is positioned with the loading hatch at the bottom;
- G) SELECTOR **4**: choose the working pressure (0.6 o 1.5 bar);
- H) SELECTOR **3**: in pressure position 2. The membrane will inflate until the chosen pressure is reached (it is recommended to do at least the first pressing at 0.6 bar);
- I) DRIPPING: leave the press under pressure for a few minutes to make the liquid drip out;
- J) DEFLATION: the next two operations must be consecutive:
- K) SELECTOR **3**: in depression position 1;
- L) SELECTOR **2**: turn the cask until it is positioned with the loading hatch at the top (the weight of the marc will make the membrane deflate more quickly);
- M) SELECTOR **3**: in position 0 (only when the blower has automatically switched itself off);
- N) SELECTOR **2**: turn the cask through a few revolutions in both directions in order to crumble (break up) the marc



REPEAT THE OPERATIONS FROM POINT “F” UNTIL THE DESIRED PRESSING DEGREE IS ACHIEVED.

## 6.6 AUTOMATIC MODE

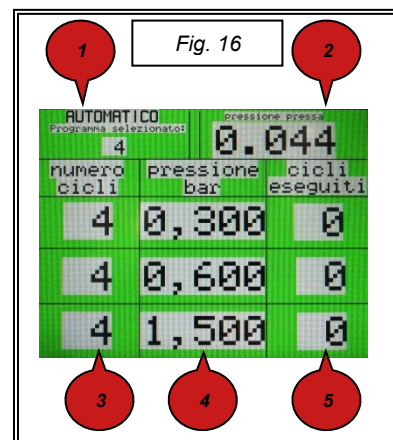
In automatic mode the machine inflates and deflates the membrane and performs the rotations for the crumbling and the dripping pauses automatically. The list of automatic programs that can be selected is on page 35 at the end of the manual.



### CHECK THAT THE LOADING HATCH AND AXIAL VALVE ARE CLOSED.

- SUPPLY POWER: using the general switch (8) and the emergency button (9);
- STARTING THE MACHINE: (button 7);
- CHECKING THE LIST OF ALARMS;
- ALARM RESET: through the reset button on the display;
- SELECTOR 5: positioned in automatic mode;
- PROGRAM SELECTOR 6: position the selector between 1 and 6 and the display will show the program details as in fig. 16:

- Program number;
- Current press pressure;
- Number of cycles to perform;
- Cycle working pressure;
- Cycles performed;



- START 7: keep the button pressed – the cask turns until it reaches position 0 - Release the button - The program chosen starts automatically.

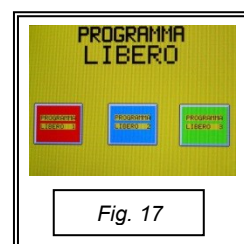
At the end of the program the press stops with the hatch towards the top and the pressure at 0 bar. the message “End of cycle” appears on the display with the time taken to perform the whole process.

## 6.7 SEMI-AUTOMATIC MODE

In semi-automatic mode the machine inflates and deflates the membrane and performs the rotations for the crumbling and the dripping pauses automatically.

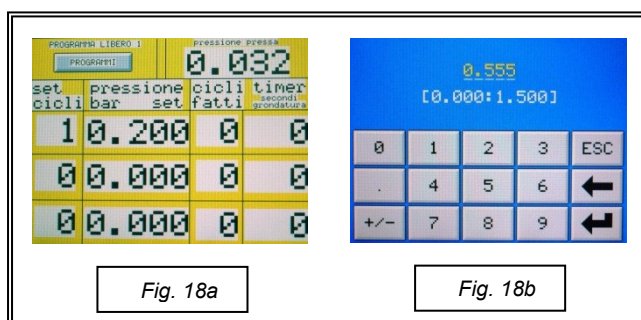
### CHECK THAT THE LOADING HATCH AND AXIAL VALVE ARE CLOSED.

- SUPPLY POWER: using the general switch (8) and the emergency button (9);
- STARTING THE MACHINE: (button 7);
- CHECKING THE LIST OF ALARMS;
- ALARM RESET: through the **reset** button on the display;
- SELECTOR 5: positioned in automatic mode;
- PROGRAM SELECTOR 6: select 0; the display shows the free program screen (fig.17). Choose a free program: 1, 2 or 3;



- PROGRAMMING: the screen shown in fig.18a appears on the display where the 3 lines of program include:

- Cycle set box: the desired number of pressing cycles is set;
- Pressure set box: the treading pressure level is set in bar (from 0 to 1.5 bar);
- Timer box: the dripping time is set (the time for which the machine stays still under pressure) in seconds (from 1 to



999 seconds corresponding to about 16 minutes).

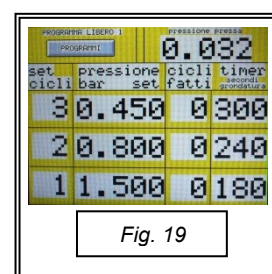
- H) ENTERING DATA: when you touch the boxes the data entry screen shown in fig.18b opens; enter the data according to preference remembering that: “.” indicates a comma, “ESC” exit from the screen, “←” delete the last number entered and “→” confirm data.
- I) START 7: keep the button pressed - the cask turns until it reaches position 0 - Release the button - The program chosen starts automatically.

At the end of the program the press stops with the hatch towards the top and the pressure at 0 bar. The message “End of cycle” appears on the display with the time taken to perform the whole process.

### EXAMPLE OF PROGRAM

Fig.19 shows an example of a semi-automatic program; in this particular case, the machine would perform:

- 3 pressings at 0.45 bar remaining under pressure for 300 seconds (5 minutes);
- 2 pressings at 0.80 bar remaining under pressure for 240 seconds (4 minutes);
- 1 pressing at 1.50 bar remaining under pressure for 180 seconds (3 minutes).



(Naturally between one pressing and another the machine automatically performs the crumbling rotations).

## 6.8 UNLOADING THE MACHINE

After checking the pressing efficiency:

- A) OPEN THE LOADING HATCH: (30) [fig.9 pag.14], making sure the hatch-locking hook (29) [fig.9 pag.14] is correctly engaged;
- B) SELECTOR 5: positioned in manual mode;
- C) SELECTOR 2: turn the cask in both directions until the dregs are completely emptied;



It is recommended to position containers or the press tank under the machine to collect the scraps, so that the working time needed for removing the marc is reduced.

## 7. CLEANING AND MAINTENANCE



Before performing any operation, whether it is cleaning, checking, maintenance or repairs, you must make sure that the machine is not plugged in.



## 7.1 CLEANING

### ROUTINE CLEANING

No special precautions are needed for cleaning the outside of the press. Rinse the machine with a jet of water without pointing the jet towards the electrical parts.

However, cleaning the inflatable membrane, which is made of food-grade material, requires greater care. In order to maintain its properties it must be washed carefully with warm water, if necessary using alkaline solutions (dilution - 10%) and then rinsing carefully.

### SPECIAL CLEANING

At the end of the season, before putting the machine away, it is recommended to clean it more thoroughly, removing the drip channels (25) [fig.9 pag.14] and cleaning them separately from the press.

Reposition the plastic plugs in the drip channel outlets (31) [fig.10 pag.14] before putting the machine away in a dry place, carefully covered.

## 7.2 MAINTENANCE

If our machines are used correctly they need very little period maintenance.

OPERATIONS	FREQUENCY			
	START OF WORK	END OF WORK	START OF SEASON	END OF SEASON
Check safety devices and guards	X		X	
Check electric cables intact	X		X	
Routine cleaning		X		
Special cleaning				X
Check ratio motor oil (18) [fig.8 pag.14]			X	
Grease chain (19) [fig.8 pag.14]			X	
Grease brasses (22-24) [fig.8 pag.14]			X	

## 7.3 COMMON TROUBLESHOOTING

During normal use, problems or malfunctioning may arise due to various causes; below is a list of the most common problems that have been encountered over the years in order to help the user solve them quickly.

### **PHOTOCELLS**

The photocells intervene even when there are no items between them.

Causes: this may be due to failure to clean the reflecting parts, the presence of small foreign objects, strong sunlight, incorrect alignment or moving insects (e.g. bees).

Solution: clean the parts and check the alignment.

## PRESSURE SWITCHES

During manual processing, the default pressure levels of 0.6 and 1.5 bar are not correct.

Solution: adjust the two pressure switches **(41-42)** [Fig.11 pag.15 ] using the front adjustment handles.

## PLC

If the PLC breaks down, contact the manufacturer to ask for a new PLC to be sent.

Solution: detach the terminal boards **(15)** [fig.7 pag.13], detach the connector RJ45 **(16)** [fig.7 pag.13], install the new PLC and reposition the connector and the terminal boards.

## ELECTRIC PANEL

If the electric panel breaks down, contact the manufacturer to ask for spare parts or a new panel to be sent.

Solution: detach the two connectors **(17)** [fig.7 pag.13], unscrew the 4 screws from behind the panel, remove it and position the new one, fixing it and reconnecting the two connectors.

## MEMBRANE

The “no pressure” alarm or “no depression” appears on the display.

Causes: the membrane could be broken.

Solution: replace the membrane:

- Clean and dry the inside of the cask well;
- Make a note of the position of the various membrane fixing plates **(26)** [fig.9 pag.14] then remove them by unscrewing the external bolts **(28)** [fig.9 pag.14];
- Remove the damaged membrane and the gasket glued to the cask;
- Scrape, clean and degrease the part of the cask around the fixing holes (it must be clean and smooth before the replacement can take place);
- Spread out a new strip of gasket and stick it with glue (Attak, Loctite, etc.), taking care to ensure that no folds or lumps are formed;
- Spread the new membrane out well;
- Reposition the bolted bars in the correct position;
- Perforate everything from the inside towards the outside (to prevent any shavings or burrs getting in and detaching or raising the gasket) - a helper from the outside can mark the position of the holes with a sharp object for the operator inside. Follow these steps:
  - Make 2 holes at the ends of the bars, checking that the membrane stays properly outstretched;
  - Fix the bars with the bolts;
  - Perform the rest of the perforating operation screwing in the screws after each hole is made without tightening them (check that the screws are not damaged during disassembly and, if so, replace them).
- Tighten all the bolts;
- Put the cask under pressure (empty) and check there are no air leaks.



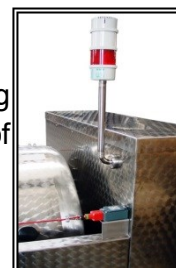
YOU CAN ASK THE MANUFACTURER OR APPROVED RETAILER FOR A FILM OF HOW TO REPLACE THE MEMBRANE.

## 8. OPTIONALS

All of the machine models can be integrated with some accessories.

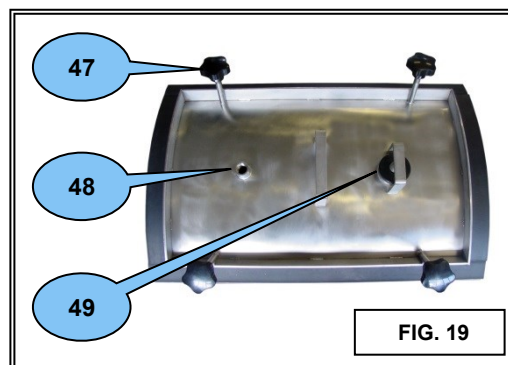
### 8.1 ACOUSTIC AND LUMINOUS WARNING

The traffic light allows a luminous warning to be produced for the different working stages of the machine (processing, end of cycle, alarm, etc.) and integrates some of them with the siren (end of cycle and alarm).



### 8.2 WATERTIGHT DOOR

The watertight door is used so that the carbonic maceration can take place directly in the cask. For installation it is sufficient just to open the loading hatch and insert the watertight door fixing it with the relevant handles (47). It is equipped with a safety valve (49) and a fitting (48) to let the gas in.



THE WATERTIGHT DOOR IS USED ONLY TO MAKE THE CARBONIC MACERATION, AT THE END OF THE PROCESS: **THE DOOR MUST BE REMOVE TO WORK WITH THE PRESS.**

### 8.3 FLOAT

The float is an electrical appliance that is connected to the pump that sucks the liquid out of the collection tank. It is fixed to the tank and allows the adjustment of the minimum and maximum levels of the liquid inside it.

## 9. SPARE PARTS

PART	DESCRIPTION	PART	DESCRIPTION
1	Pressure gauge	38	Digital pressure switch
2-3-5	Selector 0-1-2	39	Vacuum switch
4	Selector 1-2	40	Quick air coupling
6	Multi-position selector 0-7	41-42	Pressure switch
7	Luminous button	43	Side hatch micro switch
8	General switch	44	Photocells
9	Emergency button	45	Cord micro switch
10	Display	46	Cord for micro switch
11	Warning light	47	Knob for watertight door
12	PLC	49	Watertight door safety valve
18	Ratio motor		
19	Transmission chain		
20	Toothed crown		
21	Front brass		
22-24	Greaser		
23	Rear brass		
27	Membrane		
28	Screws and bolts for fixing the membrane		
30	Loading hatch		
31	Plugs for channels		
32	Bolts for fixing the channels		
34	Compressor		
35	Compressor solenoid valve		
36	Blower solenoid valve		
37	Blower		

## 10. DISPOSAL AND DEMOLITION

### 10.1 WASTE DISPOSAL



When using the machine, during the work process, waste substances or scraps are generated, which must be collected, recycled or disposed of according to the laws in force in the country where the machine is installed. Any parts of the machine that have been replaced should be treated in the same way.

### 10.2 DEMOLITION OF THE MACHINE

When the machine is demolished the parts must be split into plastic material and electrical components, which must be collected in accordance with legislation in force.

As for the metal mass, the parts need to be split into steel parts and other materials or alloys, so that they can be correctly sent for recycling by melting.



**CAUTION:** any fluids discharged must not be mixed together and must be kept in closed containers in order to prevent contamination with foreign substances. Their disposal must be performed by the relevant disposal consortiums.

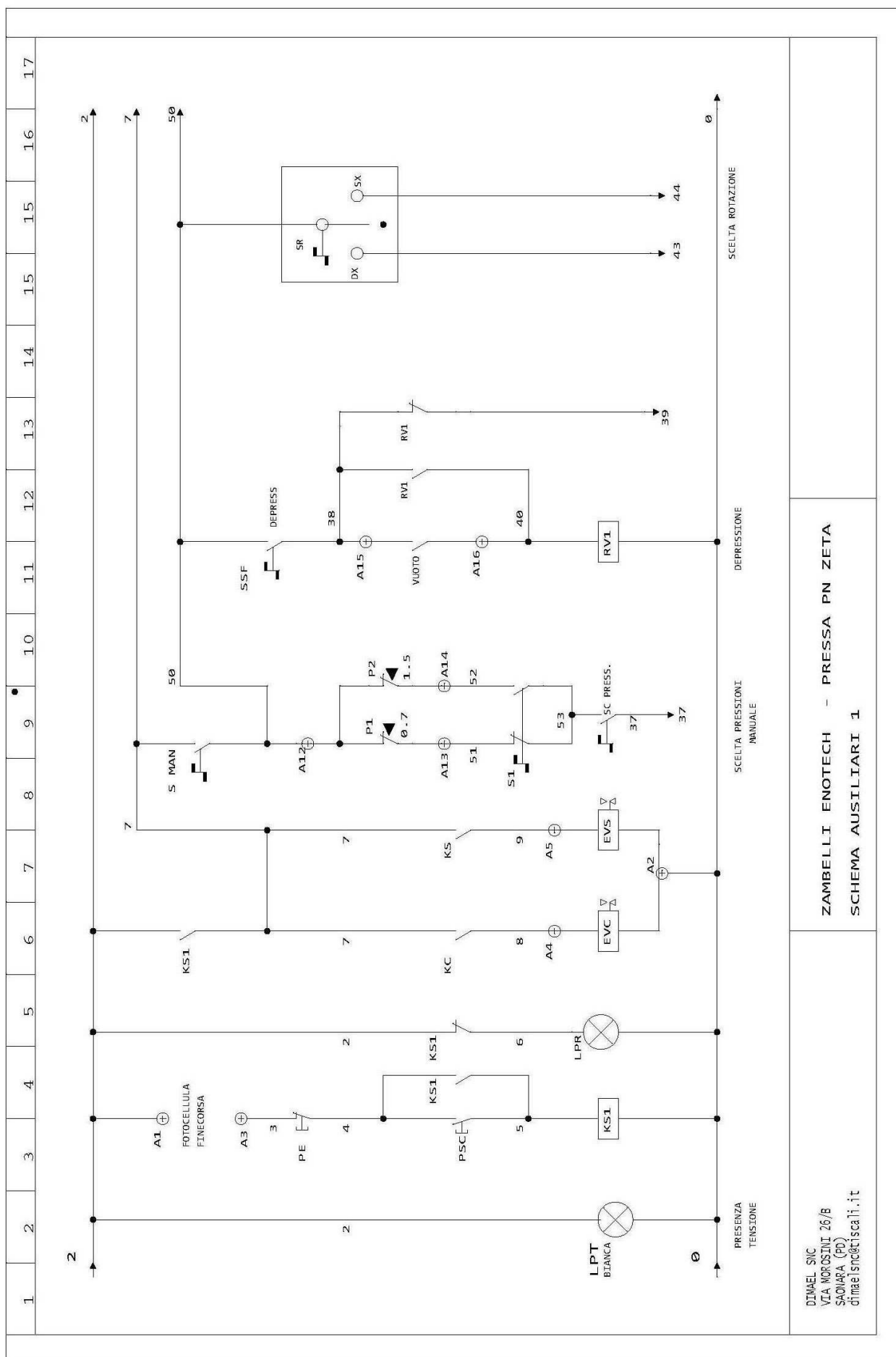
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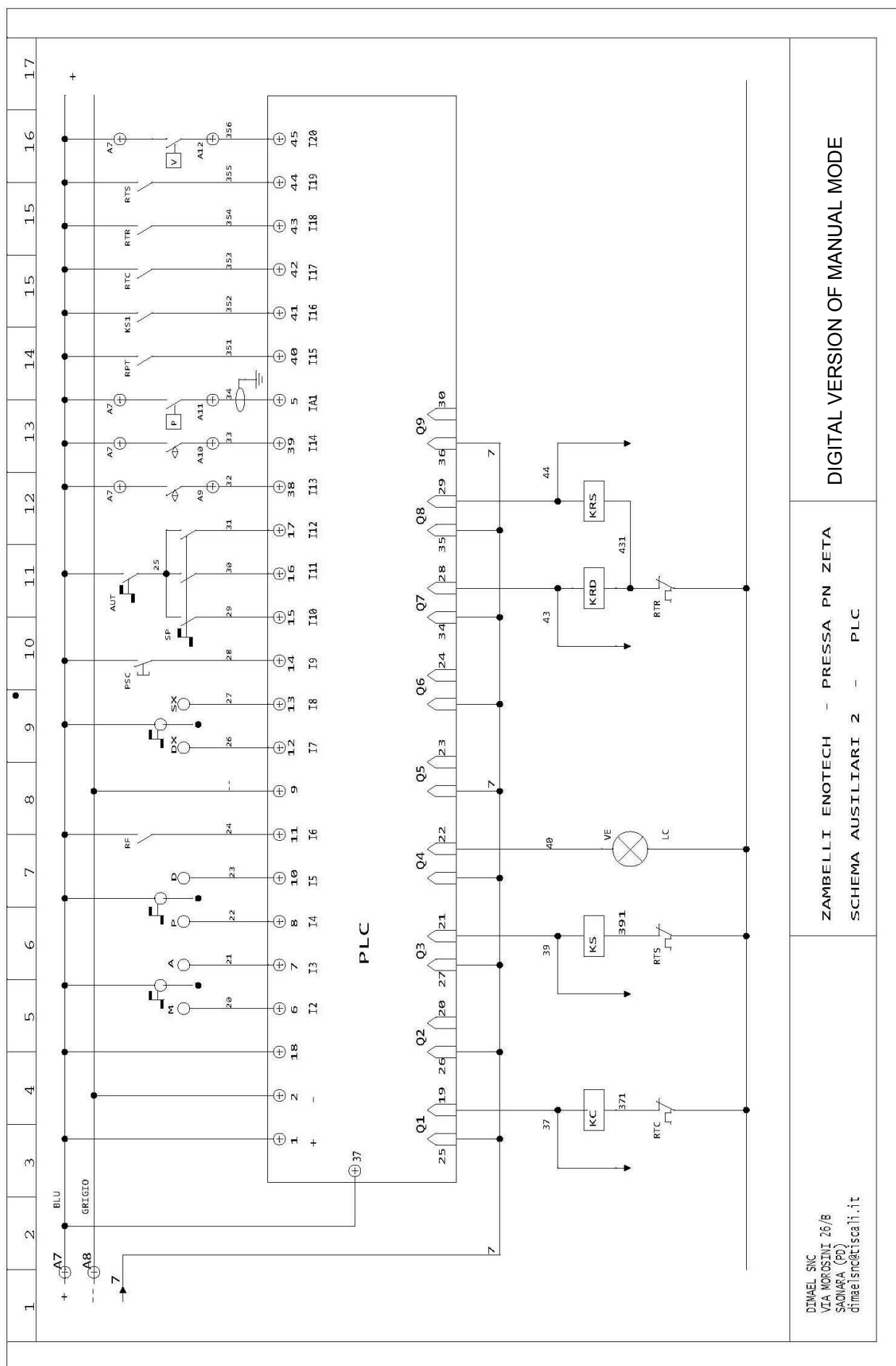
## 11. GENERAL CONDITIONS OF SALE

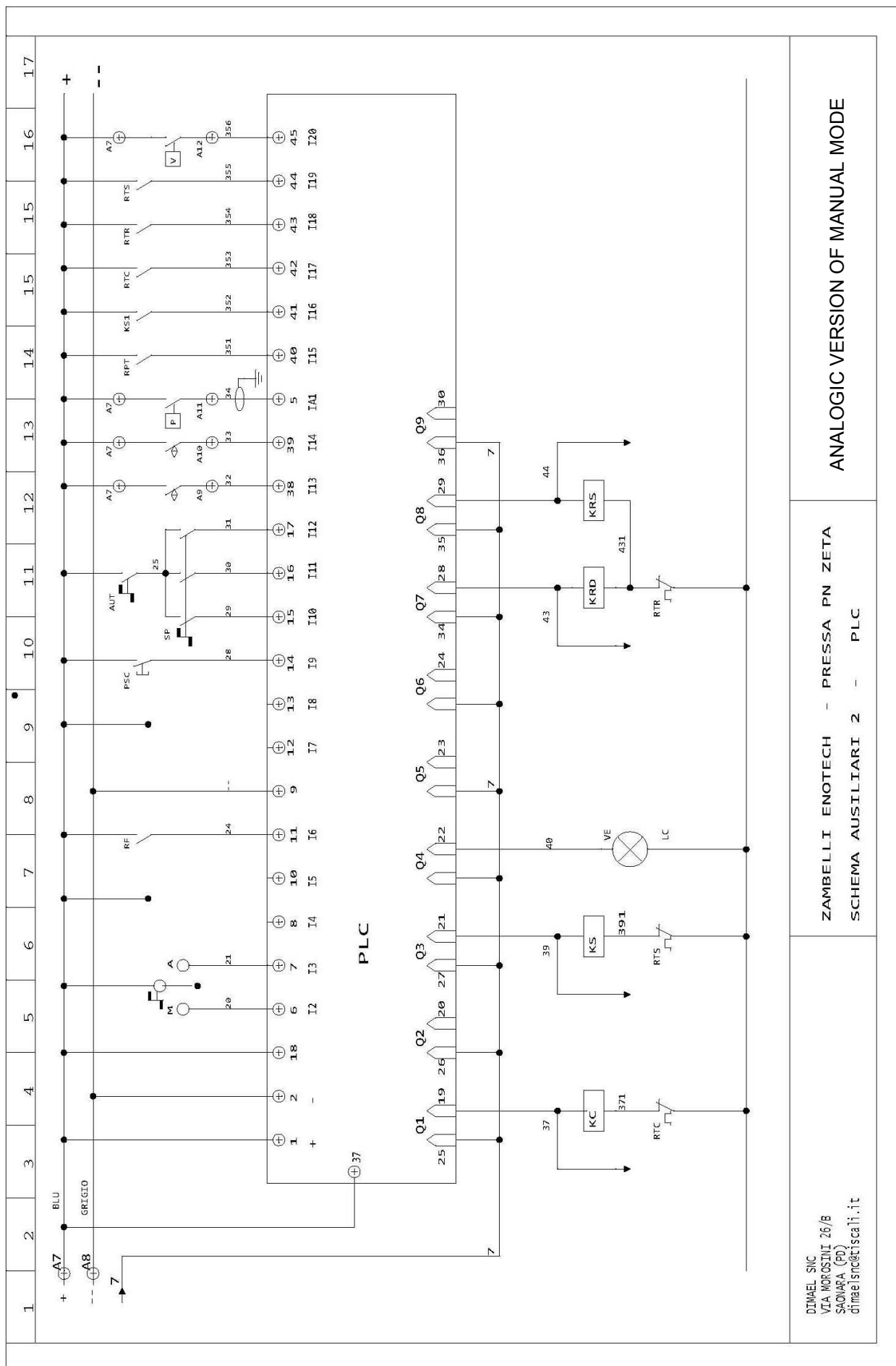
TRANSPORT:	charged to the buyer.
COMPLAINTS:	complaints will only be accepted up to eight days from receiving the goods and returns will only be accepted with our authorization and free port. The goods travel at the customers' risk.
RESERVES:	we will not cover any breakages or damage due to any use of the goods other than that for which they are intended. The warranty excludes any defects or faults due to wear on parts that are subject to wear by nature, or in the event that the returned parts have been disassembled, tampered with or repaired outside our site.
WARRANTIES:	our products are carefully checked, tested and complete with warranty. Our responsibility is limited to replacing parts that are found to be faulty after a careful check performed at our site or at the Customer's site with a fee for the transport and labour costs.
DISPUTES:	the Court of Vicenza has exclusive jurisdiction.
TECHNICAL DATA:	the technical data in this manual is for informative purposes and is not binding. The company reserves the right to make any changes to its products without prior notice.













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Via dell'Artigianato, 70/72 Z.A. – 36043 Camisano Vicentino (VI) – Italy – Tel. +39 0444.719402  
Fax +39 0444.719423

**DICHIARIAMO SOTTO LA NOSTRA RESPONSABILITÀ CHE IL PRODOTTO :**  
**WE DECLARE UNDER OUR RESPONSIBILITY THAT THE PRODUCT:**  
**WIR ERKLÄREN UNSERE VERANTWORTUNG, DASS DIE MASCHINE:**

Macchina/Machine/Maschine:	<b>HORIZONTAL PNEUMATIC PRESS PNZ</b>
Modelli/Models/Modelle:	<b>6-10-14-22-27-32-45-50-60-80</b>
Matricola/Serial number/Serienumber:	_____
Anno di costruzione/Year of manufacture/Baujahr:	_____

**È CONFORME ALLE SEGUENTI DISPOSIZIONI - IS IN RESPECT TO - STEHT IM EINKLANG MIT**

DIRETTIVA MACCHINE 2006/42/CE – MACHINERY DIRECTIVE 2006/42/CE –  
MASCHINEN-RICHTLINIE 2006/42/CE

DIRETTIVA COMPATIBILITÀ ELETTROMAGNETICA 2004/108/CE E SUCC. EMENDAMENTI  
ELECTROMAGNETIC DIRECTIVE 2004/108/CE AND SUBSEQUENT AMENDMENT  
ELEKTROMAGNETISCHE VERTRÄGLICHKEIT RICHTLINIE 2004/108/CE UND SPÄTERE ÄNDERUNGEN

REGOLAMENTO CE n° 1935/2004	MATERIALI ED OGGETTI DESTINATI A VENIRE A CONTATTO CON I PRODOTTI ALIMENTARI
REGULATION EC NO. 1935/2004	MATERIALS AND OBJECTS IN CONTACT WITH FOOD PRODUCTS
ORDNUNG CE N. 1935/2004	MATERIAL UND ARTIKEL IM KONTAKT MIT LEBENSMITTELN

REGOLAMENTO CE N° 2023/2006	BUONE PRATICHE DI FABBRICAZIONE DEGLI OGGETTI DESTINATI A VENIRE A CONTATTO CON I PRODOTTI ALIMENTARI
REGULATION EC NO. 2023/2006	GOOD PRACTICES OF MANUFACTURING OBJECTS INTENDED FOR CONTACT WITH FOOD PRODUCTS
ORDNUNG CE N. 2023/2006	GUTE HERSTELLUNGSPRAXIS FÜR DIE WAREN IM KONTAKT MIT LEBENSMITTEL

Amministratore Legale Zambelli Enotech  
Legal Administrator Zambelli Enotech  
Rechtliche Administrator Zambelli Enotech  
  
Lorenzo Pillan  
  
Il responsabile del Fascicolo Tecnico  
Responsible for the Technical Dossier  
Verantwortlich für die technischen Beschreibungen  
  
Alessio Franceschetto & Massimo Pillan

Data/Date	_____
Serie	<b>PNZ</b>
Modello	_____
Matricola	_____





## PROCESSING NOTES

NUMBER OF CYCLES	PRESSURE (Bar)	DRIPPING TIME

TYPE OF GRAPES: .....

TIME TAKEN: .....

---

NUMBER OF CYCLES	PRESSURE (Bar)	DRIPPING TIME

TYPE OF GRAPES: .....

TIME TAKEN: .....

---

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TIME TAKEN: .....

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TIME TAKEN: .....

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NUMBER OF CYCLES	PRESSURE (Bar)	DRIPPING TIME

TYPE OF GRAPES: .....

TIME TAKEN: .....

## AUTOMATIC PROGRAMS

Selectable with selector **6** [fig.6 pag.6]:

**Program 0:** semi-automatic mode

**Program 1:** 0 work cycles at 0.3 Bar  
6 work cycles at 0.6 Bar  
4 work cycles at 1.5 Bar

**Program 2:** 0 work cycles at 0.3 Bar  
3 work cycles at 0.6 Bar  
6 work cycles at 1.5 Bar

**Program 3:** 0 work cycles at 0.3 Bar  
0 work cycles at 0.6 Bar  
6 work cycles at 1.5 Bar

**Program 4:** 4 work cycles at 0.3 Bar  
4 work cycles at 0.6 Bar  
4 work cycles at 1.5 Bar

**Program 5:** 6 work cycles at 0.3 Bar  
4 work cycles at 0.6 Bar  
4 work cycles at 1.5 Bar

**Program 6:** 4 work cycles at 0.3 bar  
6 work cycles at 0.6 bar  
6 work cycles at 1.5 bar

GRAPES OF EASY EXTRACTION

FERMENTED GRAPES

GRAPES OF DIFFICULT EXTRACTION  
WHITE GRAPES

**Program 7:** Automatic rotation for the axial loading of the machine

